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EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



Art Unit: 2617

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

## DETAILED ACTION

### *Drawings*

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the Applicant's will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Demarez et al 20020151307 (hereinafter Demarez)** in view of **Applicant's admitted prior art.**

Regarding **claim 1**, Demarez discloses an island type mobile communication Arrangement (GSM network, see fig. 1, p.1, [0005]), comprising: a plurality of BTSs (BS, see fig. 1, p.1, [0005]), each corresponding to and set within a cell, and used to provide a mobile communication service to at least one mobile communication device (mobile stations MS, see p.1, [0005]) in the cell (each BS has an associated cell, see fig. 1, p.1, [0005]), a plurality of the cells forming at least one local area (LA1 and LA2, see fig. 1, p.1, [0005]) including at least one island cell (cells of LA1, see fig. 1, p.1, [0005]), each island cell having an island BTS (BS, see fig. 1, p.1, [0005]); an island BSC connected to the island BTS and used to control the operation whereof (BSS1-4, see fig. 1, p.1, [0005]); an island MSC connected to the island BSC and used to control the operation whereof (MSC, see fig. 1, p.1, [0005]), at least one mobile communication device asks the island MSC for location updating while entering the at least one island cell (location update procedure, see fig. 1, p.1, [0011]); and an island VLR corresponding to and connected to the island MSC (VLR, see fig. 1, p.1, [0006]); when the at least one mobile communication device finishes location updating (location update procedure, see fig. 1, p.1, [0011]), the island VLR records a MSISDN of each mobile communication device (VLR maintains the MS for each LA, see fig. 1, p.1, [0006]).

Demarez fails to disclose wherein the island MSC provides a special service to the at least one mobile communication device in the at least one island cell by reading the MSISDNs recorded in the island VLR.

Applicant's admitted prior art, however discloses wherein an MSC provides a special service to the at least one mobile communication device in the at

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least one island cell by reading the MSISDNs recorded in the island VLR (see p.10, lines 9-14).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching in the Applicant's admitted prior art into the system of Demarez for the benefit of sending messages to specific locations.

Regarding **claim 2**, as applied to claim 1, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention.

Demarez fails to disclose wherein the special service is a short message service.

The Applicant's admitted prior art, however, further discloses wherein the special service is a short message service (SMS, see p.10, lines 9-14).

It would therefore have been obvious to one of ordinary skill in the art to further modify Demarez using the Applicant's admitted prior art for the benefit of sending messages to specific locations.

Regarding **claim 4**, as applied to claim 1, Demarez further discloses wherein the island type mobile communication arrangement (GSM network, see fig. 1, p.1, [0005]) further comprises; at least one BSC corresponding to the at least one local area (BSS1-4, see fig. 1, p.1, [0005]), each BSC connects to the BTSs in the corresponding local area and controlling the operation thereof (BS, see fig. 1, p.1, [0005]); at least one MSC corresponding to and connected to the at least one BSC, and controlling the operation thereof (MSC, see fig. 1, p.1, [0005]); at least one VLR corresponding to and connected to the at least one BSC, and used to record the MSISDN of each mobile communication

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device in the cell corresponding to one of the BTSs (VLR maintains the MS for each LA, see fig. 1, p.1, [0006]); and at least one HLR corresponding to and connected to the at least one MSC, and used to record basic data and identification data of the at least one mobile communication device (inherent, since it is well known that a GSM system has a central database/HLR to store all relevant subscriber information such as MSISDN, access privileges and location information, see fig. 1, p.1, [006], [0010]-[0011]).

Regarding **claim 5**, as applied to claim 4, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention.

Demarez fails to disclose wherein when one of the mobile communication devices enters into the cell corresponding to one of the BTSs, the VLR corresponding to the BTS records the MSISDN of the mobile communication device; when the mobile communication device enters into the cell corresponding to the island BTS, the island VLR records the MSISDN of the mobile communication device, and the VLR deletes the MSISDN therein.

The Applicant's admitted prior art, however, further discloses wherein when one of the mobile communication devices enters into the cell corresponding to one of the BTSs, the VLR (any of cells of LA3, see fig. 1, p.5, lines 2-4) corresponding to the BTS records the MSISDN of the mobile communication device (VLR 65 records the MSISDN of the cellular phone 20 when it enters LA3, see fig. 1, p.5, lines 2-5); when the mobile communication device enters into the cell corresponding to the island BTS (VLR 61, see fig. 1, p.5, lines 8-11), the island VLR records the MSISDN of the mobile

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communication device (see fig. 1, p.5, lines 8-11), and the VLR deletes the MSISDN therein (see fig. 1, p.5, lines 5-6).

It would therefore have been obvious to one of ordinary skill in the art to further modify Demarez using the Applicant's admitted prior art for the benefit of sending messages to specific locations.

Regarding **claim 6**, as applied to claim 4, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention.

Demarez fails to disclose wherein the at least one MSC is coupled to at least one EIR, HLR, AUC, and GMSC.

The Applicant's admitted prior art, however, further discloses wherein the at least one MSC is coupled to at least one EIR, HLR, AUC, and GMSC (HLR 65 and 67, EIR 70, AUC 74, GMSC 76, see fig. 2, p.5, lines 17-18, p.6, lines 3-4 and lines 16-17 and p.7, line 18).

It would therefore have been obvious to one of ordinary skill in the art to further modify Demarez using the Applicant's admitted prior art for the benefit of sending messages to specific locations.

Regarding **claim 7**, as applied to claim 6, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention.

Demarez fails to disclose wherein an MSC is coupled to the at least one EIR, HLR, AUC, and GMSC.

The Applicant's admitted prior art, however, further discloses wherein an MSC is coupled to the at least one EIR, HLR, AUC, and GMSC (see fig. 2, p.8, line 2).

It would therefore have been obvious to one of ordinary skill in the art to further modify Demarez using the Applicant's admitted prior art for the benefit of sending messages to specific locations.

Regarding **claim 8**, Demarez further discloses wherein the island type communication arrangement is a kind of cell based communication arrangement (see fig. 1, p.1, [0005]).

Regarding **claim 9**, as applied to claim 8, Demarez further discloses wherein the cell based communication arrangement is a GSM (GSM network, see fig. 1, p.1, [0005]).

Regarding **claim 11**, as applied to claim 8, Demarez further discloses wherein the cell based communication arrangement is a third generation mobile communication arrangement (GSM network, see fig. 1, p.1, [0005]).

Regarding **claim 12**, as applied to claim 1, Demarez further discloses wherein the mobile communication device is a cell phone (mobile station MS, see p.1, [0005]).

Regarding **claim 13**, as applied to claim 1, Demarez further discloses wherein the mobile communication device is a PDA (inherent, since it is well known that a mobile station MS in a GSM network is capable of functioning as a phone, fax sender and a personal organizer, see p.1, [0005]).

Regarding **claim 14**, as applied to claim 1, Demarez further discloses wherein the mobile communication device is a smart phone (inherent, since it is well known that a mobile station MS in a GSM network is capable of connecting to the internet so that the users can access voicemail, email, WebPages and other files, see p.1, [0005]).



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5. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Demarez et al 20020151307 (hereinafter Demarez)** in view of **Applicant's admitted prior art** as applied to claims 1 and 8 above, and further in view of **Paakkonen (20040121818)**.

Regarding **claim 3**, as applied to claim 1, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention except wherein the special message is a multimedia message service.

In the same field of endeavor, Paakkonen discloses wherein the special message is a multimedia message service sending a message with multimedia content to a mobile station, see fig. 1, p.2, [0024]).

It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Paakkonen into the system of Demarez and the Applicant's admitted prior art for the benefit of sending MMS messages simultaneously with call setup information.

Regarding **claim 10**, as applied to claim 8, Demarez, as modified by Applicant's admitted prior art discloses the claimed invention except wherein the cell based arrangement is a UMT.

Paakkonen, however, further discloses wherein the cell based arrangement is a UMT (UMTS, see fig. 1, p.2, [0024]).

It would therefore have been obvious to one of ordinary skill in the art to

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Further modify the combination of Demarez, the Applicant's admitted prior art and Paakkonen for the benefit of sending MMS messages simultaneously with call setup information.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

De Oliveira 6763004 discloses a system and method for paging mobile stations in a radio telecommunications network.

Masuda et al 20010005676 discloses a radio switching system providing service restraining move of mobile subscriber, and mobile switching center adapted therefor.

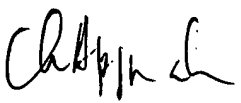
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olumide T. Ajibade-Akonai whose telephone number is 571-272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OA



CHARLES APPIAH  
PRIMARY EXAMINER